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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,799	02/11/2002	Hiroaki Mihara	03500.012897.1	4717

5514 7590 02/11/2004

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EXAMINER

STEPHENS, JUANITA DIONNE

ART UNIT PAPER NUMBER

2853

DATE MAILED: 02/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/071,799

Applicant(s)

MIHARA ET AL.

Examiner

Juanita D. Stephens

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Preliminary Amendment filed 1/2/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 19-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/28,38.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 1/2/04 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 19-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshihira et al. (US 6,074,543)..

Yoshihira et al. discloses a liquid discharge head (Fig. 21) , comprising: a plurality of discharge ports (ejection outlet 418) for discharging liquid, 2) a plurality of liquid flow paths (410) communicated with each of said discharge ports to supply liquid to each of said discharge ports (col 7, lns 34-38) , 3) a substrate (401) provided with

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heat generating members (402) for creating a bubble in the liquid (col 7, Ins 28-32), 4) a cantilever type movable member (431) arranged in each of said plural liquid flow paths, the movable member having a free end (432) on said discharge port side to face said heat generating member (col 7, Ins 50-56), 5) and a pedestal portion (supporting member 434) formed on said substrate for supporting said movable member (col 7, Ins 43-45), said movable member having a property of being curved by heat, and a portion corresponding to a movable range being separated by heating from said substrate (col 8, Ins 5-28, 6) a portion of said movable member corresponding to a movable range being separated from said substrate by means of an inner stress and a function of a releasable layer formed on said substrate (col 8, Ins 5-28), 7) wherein said movable member is formed by either one of silicon nitride, diamond, amorphous carbon hydride, silicon carbide, and silicon oxide, and being fixed to said substrate (col 14, Ins 10-26), and 8) a portion of said movable member corresponding to a movable range being provided with a recessed part on the portion adjacent to said pedestal portion. Even though Yoshihira et al. does not disclose that the movable member is formed of a silicon nitride multilayered film with the compositions being changed or impurities being added thereto, formed by silicon nitride having impurities being added thereto and formed by a photolithographic method, the claimed movable member of the present invention does not structurally distinguish over the movable member disclosed in Yoshihira et al. It has been held that determination of patentability of a product is based on the product itself and does not depend on its method of production. In re Thorpe, 227 USPQ 964,966 (Fed Cir 1985).

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### Contact Information

4. inquiry concerning this communication or earlier communications from the examiner should be directed to Juanita D. Stephens whose telephone number is (703) 308-1204. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (703) 308-4896. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Juanita Stephens  
Primary Examiner  
2853  
2/8/04